excluding transmission and transformation facilities and generating equipment, must be periodically inspected and evaluated by or under the responsibility and direction of at least one independent consultant, who may be a member of a consulting firm, to identify any actual or potential deficiencies, whether in the condition of those project works or in the quality or adequacy of project maintenance, surveillance, or methods of operation, that might endanger public safety.

§ 12.33 Exemption.

(a) Upon written request from the licensee, the Director of the Office of Energy Projects Licensing may grant an exemption from the requirements of this subpart in extraordinary circumstances that clearly establish good cause for exemption.

(b) Good cause for exemption may include the finding that the development in question has no dam except dams that meet the criteria for low hazard potential as defined by the Corps of Engineers in 33 CFR part 222.

[Order 122, 46 FR 9036, Jan. 28, 1981, as amended at 49 FR 29370, July 20, 1984]

§ 12.34 Approval of independent consultant.

At least 60 days before the initiation of an inspection under this subpart, the licensee must submit to the Director of the Office of Energy Projects Licensing for approval, with a copy to the Regional Engineer, a detailed resume that (a) describes the experience of the independent consultant; and, (b) shows that the consultant is an independent consultant as defined in § 12.31(a).

[Order 122, 46 FR 9036, Jan. 28, 1981, as amended at 49 FR 29370, July 20, 1984]

§ 12.35 Specific inspection requirements.

(a) *Scope of inspection*. The inspection by the independent consultant shall include:

(1) Due consideration of all relevant reports on the safety of the development made by or written under the direction of Federal or state agencies, submitted under Commission regulations, or made by other consultants;

(2) Physical field inspection of the project works and review and assessment of all relevant data concerning:

(i) Settlement;

(ii) Movement;

(iii) Erosion;

(iv) Seepage;

(v) Leakage;

(vi) Cracking;

(vii) Deterioration;

(viii) Seismicity;

(ix) Internal stress and hydrostatic pressures in project structures or their foundations or abutments;

(x) The functioning of foundation drains and relief wells;

(xi) The stability of critical slopes adjacent to a reservoir or project works; and

(xii) Regional and site geological conditions; and

(3) Specific evaluation of:

(i) The adequacy of spillways;

(ii) The effects of overtopping of non-overflow structures;

(iii) The structural adequacy and stability of structures under all credible loading conditions;

(iv) The relevant hydrological data accumulated since the project was constructed or last inspected under this subpart;

(v) The history of the performance of the project works through analysis of data from monitoring instruments; and

(vi) The quality and adequacy of maintenance, surveillance, and methods of project operations for the protection of public safety.

(b) *Evaluation of spillway adequacy*. The adequacy of any spillway must be evaluated by considering hazard potential which would result from failure of the project works during flood flows.

(1) If structural failure would present a hazard to human life or cause significant property damage, the independent consultant must evaluate the ability of project works to withstand the loading or overtopping which may occur from a flood up to the probable maximum flood or the capacity of spillways to prevent the reservoir from rising to an elevation that would endanger the project works.

(2) If structural failure would not present a hazard to human life of cause significant property damage, spillway adequacy may be evaluated by means